SEQUENCE LISTING

<110> Burch, Ronald
Sackler, David

<120> Contraceptive Antibody Vaccines

<130> 6750-018-999

<140> 09/831,631
<141> 2001-05-10

<160> 70

<170> PatentIn version 3.0

<210> 1
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
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<223> Description of Artificial Sequence: Primer for PCR

<400> 1
aacagctatg accatg 16

<210> 2
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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<223> Description of Artificial Sequence: Primer for PCR

<400> 2
gaattcatgg cttgggtgtg 20

<210> 3
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
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<223> Description of Artificial Sequence: CDR Derived peptide with Biotin label at the N-terminal residue

<400> 3
Thr Ala Lys Ala Ser Gln Ser Val Ser Asn Asp Val Ala
1 5 10

<210> 4
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
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<223> Description of Artificial Sequence: CDR Derived peptide with Biotin

label at the N-terminal residue

<400> 4
Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr
1 5

<210> 5
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
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<223> Description of Artificial Sequence: CDR Derived peptide with Biotin label at the N-terminal residue

<400> 5
Phe Ala Gln Gln Asp Tyr Ser Ser Pro Leu Thr
1 5 10
<210> 6
<211> 7
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<220>
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<223> Description of Artificial Sequence: CDR Derived peptide with Biotin label at the N-terminal residue

<400> 6
Phe Thr Asn Tyr Gly Met Asn
1 5

<210> 7
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: CDR Derived peptide with Biotin label at the N-terminal residue

<400> 7
Ala Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp
1 5 10 15
Asp Phe Lys Gly

<210> 8
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: CDR Derived peptide with Biotin label at the N-terminal residue

<400> 8
Ala Arg Ala Tyr Tyr Gly Lys Tyr Phe Asp Tyr
1 5 10

<210> 9
<211> 221
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Sperm cell specific epitope

<400> 9
gaattccagc cttcaggtga acatggctcc ggtgaacagc cttctggtga gcaggcctcg 60
ggtgaacagc cttcaggtga gcacgcttca ggggaacagg cttcaggtgc accaatttca 120
agcacatcta caggcacaat attaaattgc tacacatgtg cttatatgaa tgatcaagga 180
aaatgtcttc gtggagaggg aacctgcatc actcagaatt c 221

<210> 10
<211> 69
<212> PRT
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Sperm cell specific epitope

<400> 10
Gln Pro Ser Gly Glu His Gly Glu Gln Pro Ser Gly Glu Gln Ala Ser
1 5 10 15
Gly Glu Gln Pro Ser Gly Glu His Ala Ser Gly Glu Gln Ala Ser Gly
20 25 30
Ala Gln Ile Ser Ser Thr Ser Thr Gly Thr Ile Leu Asn Cys Tyr Thr
35 40 45
Cys Ala Tyr Met Asn Asp Gln Gly Lys Cys Leu Arg Gly Glu Gly Thr
50 55 60
Cys Ile Thr Gln Asn
65

<210> 11
<211> 75
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Cloning primers for SP10

<400> 11
gaattccagc cttcaggtga acatggctcc ggtgaacagc cttctggtga gcaggcctcg 60
ggtgaacagc cttag 75

<210> 12
<211> 75
<212> DNA
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<220>
<221> misc_feature
<223> Description of Artificial Sequence: Cloning primers for SP10

<400> 12
gtgagcacgc ttcaggggaa cagccttcag gtgcaccaat ttcaagcaca tctacaggca 60
caatattaaa ttgct 75

<210> 13
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Cloning primers for SP10

<400> 13
acacatgtgc ttatatgaat gatcaaggaa aatgtcttcg tggagaggga acctgcatca 60
ctcagaattc 70

<210> 14
<211> 70
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Cloning primers for SP10

<400> 14
acacagcagc ttatatgaat gatcaaggaa aagcacttcg tggagaggga accgcaatca 60
ctcagaattc 70

<210> 15
<211> 79
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Cloning primers for SP10

<400> 15
gaattctgag tgatgcaggt tccctctcca cgaagacatt ttccttgatc attcatataa 60
gcacatgtgt agcaattta 79

<210> 16
<211> 79
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Cloning primers for SP10

<400> 16
gaattctgag tgattgcggt tccctctcca cgaagtgctt tttgatgatc attcatataa 60
gctgctgtgt agcaattta 79

<210> 17
<211> 75
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Cloning primers for SP10

<400> 17

atattgtgcc tgtagatgtg cttgaaattg gtgcacctga agcctgttcc cctgaagcgt 60
gctcacctga aggct 75

<210> 18
<211> 67
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Cloning primers for SP10

<400> 18
gttctcccga ggcctgctca ccagaaggct gttcaccgga gccatgttca cctgaaggct 60
ggaattc 67

<210> 19
<211> 210
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Sperm cell specific epitope MSA-6

<400> 19
gtcggcagcc tccgaagcag cccgctccag agcccgctgc tccgaccgct cgtccagagc 60
agcctctgct tgctgttcct cttgctgcga tacagctgcg gcgacggcag ctgcagccga 120
cgatactgcg acttgacggt gtgccggcga atgtacttgc tgctgcgatt cacggacccg 180
ccgctcccgc agacgtgctg cgtcttgagc 210

<210> 20
<211> 70
<212> PRT
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Sperm cell specific epitope MSA-6

<400> 20
Gln Pro Ser Glu Ala Ser Ser Gly Glu Val Ser Gly Asp Glu Ala Gly
1 5 10 15
Glu Gln Val Ser Ser Glu Thr Asn Asp Lys Glu Asn Asp Ala Met Ser
20 25 30
Thr Pro Leu Pro Ser Thr Ser Ala Ala Ile Thr Leu Asn Cys His Thr
35 40 45
Cys Ala Tyr Met Asn Asp Asp Ala Lys Cys Leu Arg Gly Glu Gly Val
50 55 60

Cys Thr Thr Gln Asn Ser
65 70

<210> 21
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature

<223> Description of Artificial Sequence: Oligomer from MSA 63

<400> 21
gtcggcagcc tccgaagcag cccgctccag agcccgctgc tccga 45

<210> 22
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Oligomer from MSA 63

<400> 22
agcccgctgc tccgaccgct cgtccagagc agcctctgct tgctg 45

<210> 23
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Oligomer from MSA 63

<400> 23
agcctctgct tgctgttcct cttgctgcga tacagctgcg gcgac 45

<210> 24
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Oligomer from MSA 63

<400> 24
tacagctgcg gcgacggcag ctgcagccga cgatactgcg acttg 45

<210> 25
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
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<223> Description of Artificial Sequence: Oligomer from MSA 63

<400> 25
cgatactgcg acttgacggt gtgcacgcga atgtacttgc tgctg 45

<210> 26
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Oligomer from MSA 63

<400> 26
atgtacttgc tgctgcgatt cacggacgcg ccgctcccgc agacg 45

<210> 27
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Oligomer from MSA 63

<400> 27
cgattcacgg acgcgccgct cccgcagacg tgctgcgtct tgagc 45

<210> 28
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Consensus sequence

<400> 28
Gln Pro Ser Glu Ala Ser Ser Gly Glu Val Ser Gly Asp Glu Ala Gly
1 5 10 15
Glu

<210> 29
<211> 384
<212> DNA
<213> Artificial Sequence

<220>
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<223> Description of Artificial Sequence: Consensus sequence

<400> 29
atggcttggt gttggacctt gctattcctg atggcagctg cccaaagtgc ccaagcagat 60
atgcaaatga cacaaagtcc tagtagtttg agtgctagtg tgggagatca agtgacaatc 120
acatgtcggg ctagtcaaag tatcagtaac tgtttggctt ggtatcaaca aaagcctgga 180
aaggctccta agttgttgat ctatgctgct agtagtttgg agagtggagt gcctagtcgg 240
ttcagtggaa gtggaagtgg aacacggttc accttgacca tgagtagttt gcaacctgag 300
gatttcgcta cctattattg tcaacaatat aacagtttgc cttggacctt cggacaagga 360
accaaggtgg agatcaagga attc 384

<210> 30
<211> 417
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Consensus sequence

<400> 30
atggcttggg tgtggacctt gctattcctg atggcagctg cccaaagtgc ccaagcacag 60
gttcagctgg tgcagtgtgg cgctgaggtg aagaagcctg gcgcttctgt gaaggtgtct 120
tgcaaggctt ctggctacac attcacatct tacgctatat cttggaattg ggtgaggcag 180

gctcctggcc agggcctgga gtggatgggc tggataaatg gaaatggaga tacaaattac 240
gcccagaagt tccagggaag ggtgactata actgctgata cttctacttc tactgcttac 300
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ggctacggct ctgattattg gggacaggga acactggtta cagtttcttc tgaattc 417

<210> 31
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Consensus sequence

<400> 31
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt cagttggaga gaaggttact 60
atg 63

<210> 32
<211> 74
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Consensus sequence

<400> 32
gcaagctcat agtaaccttc tctccaactg acacacgata gggaggatgg agactgtgac 60
atcacaatgt ctgc 74

<210> 33
<211> 84
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 33
agctgcgtcg gcagcctccg aagcagcccg ctccagagcc cgctgctggc atggtaccag 60
cagaaaccag ggcagtctcc taaa 84

<210> 34
<211> 72
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 34
ctgccctggt ttctgctggt accatcggag cagcgggctc tgcggagcgg gctgcttcgg 60
acggctgccg ac 72

<210> 35
<211> 78

<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 35
gacattgtga tgtcacagtc tccatcctcc ctagctgtgt cagttggaga gaaggttact 60
gtgagcgcta agtccagt 78

<210> 36
<211> 75
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 36
gagagccttt tatatagtag caatcaaaag atctacttgg cctggtacca gcagaaacca 60
gggcagtctc ctaaa 75

<210> 37
<211> 67
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 37
ctgctgattt actgggcatc cactagggaa tctggggtcc ctgatcgctt cacaggctgg 60
atctggg 67

<210> 38
<211> 68
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 38
gcacagcaat attatagata tctcggacgt tcggtggagc caccaagctg caaatcaaac 60
cggaattc 68

<210> 39
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature

<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 39
accgcctgtg aagcgatcag gcaccccaga ttccctagtg gatgcccagt aaatcagcag 60
tttaggaga 69

<210> 40
<211> 77
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 40
ctgccctggt ttctgctggt accaggccaa gtagatcttt tgagattgct actatataaa 60
aggctctgac tggactt 77

<210> 41
<211> 78
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 41
agcgctcata gtaaccttct ctccaactga cacagctagc gacgatcgag actgtgacat 60
cacaatgtct gcttgggc 78

<210> 42
<211> 78
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 42
gaattcccgt ttgatttcca gcttggtgcc tccaccgaac gtccgaggat atctataata 60
ttgctgtgcg taataaac 78

<210> 43
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 43
agagatttga gtctgaccat cagcagtgtg aaggctgaag acgtggcagt ttattac 57

<210> 44
<211> 57
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 44
tgccaggtct tcagccttga cactgctgat ggtgagagtg aaatctgtcc cagatcc 57

<210> 45
<211> 66
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 45
tcgtgccagt tcctcgtcga ctagctcttc gactagctcc tgctgctctt gtcggtcacg 60
gaattc 66

<210> 46
<211> 75
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Construct for MSA1 and MSALVAC-1

<400> 46
gaattccgtg accgacaaga gcagcaggag ctagtcgaag agctggtcga cgaggaactg 60
gcacgacggg ttcgt 75

<210> 47
<211> 80
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for LDH-C4

<400> 47
gaattcatgg cttgggtgtg gaccttgcta ttcctgatgg cagctgccca aagtgcccaa 60
gcacagatcc agttggtgca 80

<210> 48
<211> 79

<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for LDH-C4

<400> 48
gtctggacct gagctgaaga agcctggaga gacagtcaag atctccgcta aggcttctgg 60
gtataccttc acaaactag 79

<210> 49
<211> 80
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 49
gaatgaactg ggtgaagcag gctccaggaa agggtttaaa gtggatgggc tggataaaca 60
cctacactgg agagccaaca 80

<210> 50
<211> 80
<212> DNA
<213> Artificial Sequence

<220>
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<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 50
tatgctgatg acttcaaggg acggtttgcc ttctctttgg aaacctctgc cagcactgcc 60
tatttgcaag atcaacacct 80

<210> 51
<211> 70
<212> DNA
<213> Artificial Sequence

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<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 51
caaaaatgag gacacggcta catatttcgc tgcaagagcc tactatggta aatactttga 60
ctacgaattc 70

<210> 52
<211> 49
<212> DNA
<213> Artificial Sequence

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<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 52
gaattcgtag tcaaagtatt taccatagta ggctcttgca gcaaatatg 49

<210> 53
<211> 81
<212> DNA
<213> Artificial Sequence

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<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 53
tagcctgtgt ctcatttttt gaggttgttg atctgcaaat aggcagtgct ggcagaggtt 60
tccaaagaga aggcaaaccg t 81

<210> 54
<211> 80
<212> DNA
<213> Artificial Sequence

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<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

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cccttgaagt catcagcata tgttggctct ccagtgtagg tgtttatcca gcccatccac 60
tttaaaccct ttcctggagc 80

<210> 55
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 55
ctgcttcacc cagttcattc catagtttgt gaaggtatac ccagaagcct tagcggagat 60
cttgactgtc tctccaaggc t 81

<210> 56
<211> 100
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 56
tcttcagctc aggtccagac tgcaccaact ggatctgtgc ttgggcactt tcggcagctg 60
ccatcaggaa tagcaaggtc cacacccaag ccatgaattc 100

<210> 57
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 57

agtattgtga tgacccagac tcccaaattc ctgcttgtat cagcaggaga cagggttacc 60
ata 63

<210> 58
<211> 64
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVHCOL1

<400> 58
acctgcaagg ccagtcagag tgtgagtaat gatgtagctt ggtaccaaca gaaaaccagg 60
gcag 64

<210> 59
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 59
tctcctaaac tgctgatata ctatgcatcc aatcgctaca ctggagtccc tgatcgcttc 60
actggcagt 69

<210> 60
<211> 64
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 60
ggatatggga cggatttcac tttcaccatc agcactgtgc aaggctgaag acctggcagt 60
ttat 64

<210> 61
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 61
ttctgycagc aggattatag ctctccgctc accttcggtg ctgggaccaa gctggacctg 60
aaagaattc 69

<210> 62
<211> 78
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature

<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 62
gaattctttc agctccagct tggtcccagc accgaacgtg agcggagagc tataatcctg 60
ctgacagaaa taaactgc 78

<210> 63
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 63
caggtcttca gcctgcacag tgctgatggt gaaagtgaaa tccgtcccat atccactgcc 60
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<210> 64
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 64
gaagcgatca gggactccag tgtagcgatt ggatgcatag tatatcagca gtttaggaga 60
ctgccctgg 69

<210> 65
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
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<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 65
tttctgttgg taccaagcta catcattact cacactctga ctggccttgc tggttatggt 60
aac 63

<210> 66
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 66
cctgtctcct gctcatacaa gcaggaattt gggagtctgg gtcatcacaa tacttgcttg 60
ggc 63

<210> 67
<211> 68
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 67
ttcgctcagc aggattatag ctctccgctc acgttcggtg ctgggaccaa gctggagctg 60
aaagaatc 68

<210> 68
<211> 78
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<223> Description for Artificial Sequence: Constructs for 2CAVLCOL1

<400> 68
gaattctttc agctccagct tggtcccagc accgaacgtg agcggagagc tataatcctg 60
ctgagcgaaa taaactgc 78

<210> 69
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<212> DNA
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<220>
<221> CDS
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<400> 69
atg gct tgg gtg tgg acc ttg cta ttc ctg atg gca gct gcc caa agt 48
Met Ala Trp Val Trp Thr Leu Leu Phe Leu Met Ala Ala Ala Gln Ser
1 5 10 15
gcc caa gca gac att gtg atg tca cag tct cca tcc tcc cta gct gtg 96
Ala Gln Ala Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val
20 25 30

tca gtt gga gag aag gtt act atg agc tgc aag tcc agt cag agc ctt 144
Ser Val Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu
35 40 45
tta tat agt agc aat caa aag atc tac ttg gcc tgg tac cag cag aaa 192
Leu Tyr Ser Ser Asn Gln Lys Ile Tyr Leu Ala Trp Tyr Gln Gln Lys
50 55 60
cca ggg cag tct cct aaa ctg ctg att tac tgg gca tcc act agg gaa 240
Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu
65 70 75 80
tct ggg gtc cct gat cgc ttc aca ggc ggt gga tct ggg aca gat ttc 288
Ser Gly Val Pro Asp Arg Phe Thr Gly Gly Gly Ser Gly Thr Asp Phe
85 90 95
act ctc acc atc agc agt gtg aag gct gaa gac ctg gca gtt tat tac 336
Thr Leu Thr Ile Ser Ser Val Lys Ala Glu Asp Leu Ala Val Tyr Tyr
100 105 110
tgt cag caa tat tat aga tat cct cgg acg ttc ggt gga ggc acc aag 384
Cys Gln Gln Tyr Tyr Arg Tyr Pro Arg Thr Phe Gly Gly Gly Thr Lys
115 120 125
ctg gaa atc aaa cgg 399

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Leu Glu Ile Lys Arg
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<210>  70
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<212>  PRT
<213>  Artificial Sequence

<220>
<221>  misc_feature
<223>  Description for Artificial Sequence: Constructs for 2CAVLCOL1

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Ala Gln Ala Asp Ile Val Met Ser Gln Ser Pro Ser Ser Leu Ala Val
            20                  25                  30

Ser Val Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu
        35                  40                  45

Leu Tyr Ser Ser Asn Gln Lys Ile Tyr Leu Ala Trp Tyr Gln Gln Lys
    50                  55                  60

Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu
65                  70                  75                  80

Ser Gly Val Pro Asp Arg Phe Thr Gly Gly Gly Ser Gly Thr Asp Phe
                85                  90                  95

Thr Leu Thr Ile Ser Ser Val Lys Ala Glu Asp Leu Ala Val Tyr Tyr
            100                 105                 110

Cys Gln Gln Tyr Tyr Arg Tyr Pro Arg Thr Phe Gly Gly Gly Thr Lys
        115                 120                 125

Leu Glu Ile Lys Arg
    130
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